

REMARKS

Claims 7 and 15 have been cancelled. Claims 1-6, 8-14, and 16-18 are currently pending in the application.

The Examiner objected to claim 16 because of an informality. The Examiner stated the phrase “a mechanism” should be changed to “the mechanism.” Applicant respectfully disagrees. Any claim term referred to as “the ...” must have been named previously in the same claim or in a claim from which it depends. Claim 16 depends from claim 9. Claim 9 does not recite “a mechanism that reads out at least a subset of the plurality of pixels and uses the signal values obtained from the readout to determine the integration times of the plurality of pixels.” Therefore, the phrase “a mechanism” in claim 16 is correct and Applicant respectfully requests withdrawal of the objection.

The Examiner rejected claims 1, 3-6, 8, 9, 11-14, and 16-18 under 35 U.S.C. § 102(e) as being anticipated by Morris et al. (USPN 6,665,010; hereinafter “Morris”). The Examiner rejected claims 2 and 10 under 35 U.S.C. § 103(a) as being unpatentable over Morris in view of Bayer (USPN 3,971,065). Applicant respectfully requests reconsideration of the application.

102(b) Rejection

In order for a reference to anticipate an invention, each and every element of the claimed invention must be found in a single reference. “The identical invention must be shown in as complete detail as is contained in the ... claim.” MPEP § 2131. Morris does not teach “color filter kernels having the same colors in a predetermined arrangement.” Moreover, Morris does not teach or suggest different integration times for “color filter kernels having the same colors in a predetermined arrangement.”

The Examiner argues on page 2 of the final office action “that the feature ‘different sets of identical kernels’ is not a claim language.” While it is true the word “identical” is not used in independent claims 1 and 9, claims 1 and 9

do state “the color filter pattern forms a plurality of color filter kernels having the same colors in a predetermined arrangement.” By way of example only, the Bayer pattern includes an array of Bayer kernels, with each kernel comprising two green, one red, and one blue pixel. One embodiment of a predetermined arrangement of green, red, and blue color filters is shown in color filter kernels 40a and 40b in figures 2a. Another embodiment of a predetermined arrangement of green, red, and blue color filters is shown in color filter kernels 60a and 60b in figures 2b.

Morris discusses grouping pixels in a different ways. One technique groups pixels by different characteristics of the array. For example, a lens may concentrate brightness levels on the array in a pattern of concentric brightness circles. In this manner, the lens typically causes the inner circles to have higher brightness levels than the outer circles, and each group may be associated with a different brightness circle. As another example, Morris groups pixels by the different colors sensed by the array. One group may be associated with a red pixel color and another group with a green pixel color. The groups in this technique therefore include pixels of different colors. Nothing found in Morris teaches “color filter kernels having the same colors in a predetermined arrangement” and using different integration times for the color filter kernels having the same colors in a predetermined arrangement. Therefore, for at least the following reason, Morris does not anticipate independent claims 1 and 9.

When evaluating a claim, the claim as a whole must be considered, and as such, every limitation in the claim must be considered. MPEP § 2106. “Moreover, it is incumbent upon the examiner to identify wherein each and every facet of the claimed invention is disclosed in the applied reference.” Ex parte Levy, 17 USPQ2d 1461, 1462 (Bd Pat App & Inter 1990). The Examiner did not cite in the final office action where all of the claim limitations are taught in Morris, and in particular where Morris teaches “kernels having the same colors in a predetermined arrangement wherein the kernels are arranged in at least two different uniformly distributed sets.” Applicant respectfully requests the Examiner identify where every element and limitation in claims 1 and 9 are found in Morris if the Examiner maintains this rejection in the future.

With respect to independent claims 8 and 17, the Examiner argues on page 3 of the final office action that “using the same sync signal” is not claim language. Applicant respectfully submits the Examiner is incorrect. Claims 8 and 17 expressly state “a readout mechanism that provides a series of output signal values associated with a row sync signal with a number of data signal values corresponding to a number of pixels in a row or desired portion of a row; wherein the output signal values have signals that are generated from pixels within at least two physically separate rows within the array.” Thus, claims 8 and 17 recite one row sync signal (“a row sync signal”), where “a series of output signal values” are associated with the row signal, and “the output signal values have signals that are generated from pixels *within at least two physically separate rows* within the array.”

Applicant respectfully submits Morris does not teach a sync signal that reads out pixels from two different rows. The time measuring circuits (130a, 130b, 130c, 130d) shown in FIG. 5, one for each of the groups 113, is responsive to pixel sensing unit 118, when an intensity exceeds a threshold level (see lines 52-59 in column 3). This has nothing to do with reading out data signal values from two different rows using the same sync signal. Therefore, for at least the following reason, Morris does not anticipate independent claims 8 and 17.

“Claims in dependent form shall be construed to include all the limitations of the claim incorporated by reference into the dependent claim.” 37 CFR § 1.75. Claims 3-6 depend from and include all of the limitations of independent claim 1, claims 11-14 and 16 depend from and include all of the limitations of independent claim 9, and claim 18 depends from and includes all of the limitations of independent claim 17. For at least the reasons discussed above, Morris does not anticipate independent claims 1, 9, and 17. Accordingly, dependent claims 3-6, 11-14, 16, and 18 are also not anticipated by Morris.

103(a) Rejection

The Manual of Patent Examining Procedure states the following in Section 2143:

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

Applicant submits the combination of Morris and Bayer does not render Applicant's claims 2 and 10 obvious because the combination does not meet the three basic criteria. The argument below, however, will focus on the third criterion.

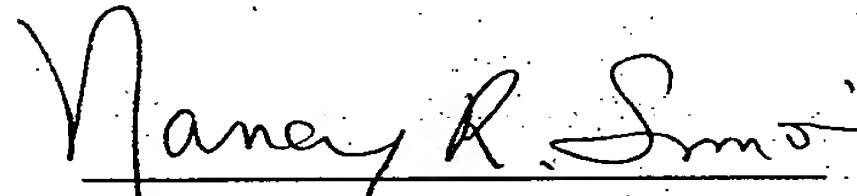
Neither Morris nor Bayer teach or suggest "color filter kernels having the same colors in a predetermined arrangement." Moreover, the combination of Morris with Bayer does not teach or suggest this claim limitation. Therefore, for at least the following reason, independent claims 1 and 9 are not obvious in view of Morris and Bayer.

Claim 2 depends from independent claim 1 and claim 10 depends from independent claim 9. "If an independent claim is not rendered obvious by prior art, then any claim depending from the independent claim is not obvious." In re Fine, 5 USPQ2d 1596 (Fed. Cir. 1988) (see also M.P.E.P. § 2143.03). Therefore, claims 2 and 10 are also not obvious in view of Morris and Bayer.

Should the Examiner consider that additional amendments are necessary to place the application in condition for allowance, the favor is requested of a telephone call to the undersigned counsel for the purpose of discussing such amendments.

For the reasons set forth above, it is believed that the application is in condition for allowance. Accordingly, reconsideration and allowance of claims 1-6, 8-14, and 16-18 are respectfully solicited.

Respectfully submitted,

A handwritten signature in cursive script, reading "Nancy R. Simon". The signature is written in dark ink and is positioned above the printed name and title.

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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.